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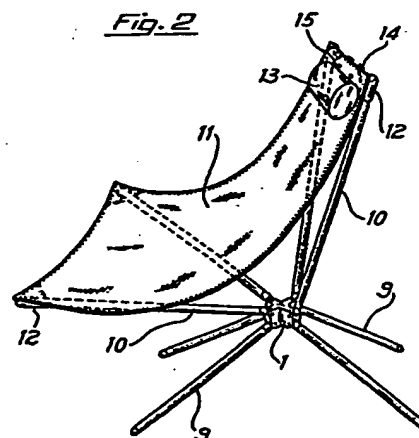
⑦① Applicant: **SAPORITI ITALIA S.p.A.**
 Via Gallarate, 23
 I-21010 Besenote Varese(IT)

⑦② Inventor: **Saporiti, Sergio**
 Via Sella 1
 I-21010 Besenote Varese(IT)

⑦④ Representative: **Riccardi, Sergio**
 Riccardi & Co. Via Macedonio Melloni, 32
 I-20129 Milano(IT)

⑥④ Folding article of furniture with central joint.

⑤⑦ The invention relates to an article of furniture, having a central joint to which the structural elements forming the article frame are pivotally connected, so that said frame elements may be folded in a collapsed condition, thus obtaining a compact position of minimum occupied space for the entire article.



"FOLDING ARTICLE OF FURNITURE WITH CENTRAL JOINT"

The present invention relates to a folding article of furniture having a frame, the elements of which are all pivotally connected to a central joint, so that in the folded condition said frame takes a compact position, allowing to store and carry the article in a practical bag of reduced size.

5 The term article of furniture used herein is intended to mean in general a piece of furniture where one can sit, such as a simple chair, an armchair, a deck-chair, a stool, a sofa, or even another kind of piece such as a table of any size.

10 In the field of sitting articles of furniture, the solutions hitherto devised for obtaining a seat which is at the same time comfortable and totally collapsible in a folded carrying condition are numberless, but all these approaches led to chairs in which at least one side or face of the chair remained erected or unfolded, so that their folded condition was never so complete as to allow to place a chair into a tubular bag of reduced size.

15 This problem is solved in a unique and efficient way by the article of the present invention, provided with a central joint from which all the frame elements are extended, so that said frame may be folded in the same manner as a dual support tripod for photographic cameras or portable screens.

More particularly, the central joint consists of a block provided with four lower pivotal connections for four legs as well as four upper pivotal connections for four bars

at the free ends of which one can apply the four corner pockets of a cloth used as a seat, preferably provided with a headrest pad or cushion, the whole being adapted to be placed, when in the folded and collapsed condition, in a long and narrow tubular bag, of a reduced size and easy to be handled and carried.

5 Objects, features and advantages of the article of furniture according to the present invention will become apparent and clear from the following detailed description of a preferred embodiment, which however is given as a non limiting example only and to be read with reference to the accompanying sheets of illustrative and diagrammatic drawings, which are also to be taken as a non limiting example of
10 the scope of the invention, in which:

Fig. 1 is an exploded partial perspective view of the frame of the article of furniture according to the present invention;

Fig. 2 is a perspective view of the article of furniture in the erected and assembled condition;

15 Fig. 3 is a perspective view showing the system of folding the frame, and more particularly the frame in the folded and collapsed condition is shown in solid lines, while the frame in the erected and unfolded condition is shown in broken lines;

Fig. 4 is a plan view of the seat cloth;

Fig. 5 is a side view of the seat cloth of Fig. 4;

20 Fig. 6 is a perspective view of a bag adapted to carry the article of furniture of the present invention in the disassembled condition;

Fig. 7 is a front perspective view of an easy chair with footrest; and

Fig. 8 is a rear perspective view of the article shown in Fig. 7.

With reference now to the various figures of the accompanying drawings, the
25 central core, both materially and conceptually, of the article of furniture according to

the present invention consists of the central joint 1, comprising a cross shaped block, of which each arm has an upper fork-like seat 2 and a lower fork-like seat 3, the fork being provided with holes 4 for the passage of a pin 5 on which are rotating feet 6 of stub pipes 7 threaded in the seats 2 and 3 and guided by shaped surfaces 8 for sliding on the rounded corners of said forks. On the stub pipes 7 bars are inserted and fixed thereto by locking screws 19.

The four lower bars 9 are the legs of the article of furniture, while the four upper bars 10 are used as corner supports for a seat cloth 11.

Said seat cloth 11 has a quadrangular shape and at each corner is provided with a suitably reinforced pocket 12, which is threaded on the free end of the four upper bars 10. On the side opposite to the pockets 12, the seat cloth 11 has a headrest pad 13 preferably of a cylindrical shape, fixed to the seat cloth by means of knotted cords 14 passing through suitable eyelets 15 in the seat cloth 11.

In the disassembled and collapsed condition, the frame assumes the folded position shown with solid lines in Fig. 3 and together with the rolled up seat cloth, fits easily in the cylindrical bag 16 provided with grips 17 and longitudinal zip fastener 18, although the bag 16 could be opened at one of the two ends of the tubular envelope.

In the variant of Figs. 7 and 8 one can see that the four upper bars 10 may also be all of the same length, so as to form a stool or camping chair, and in this case the pad 13 has the function of footrest or sitting support.

As it was indicated hereinbefore, the frame bars might also have different lengths, shapes and/or positions, so as to assemble according to the circumstances a chair, a deck-chair, an easy chair, a stool, a sofa or another article of furniture such as a table or camping table, of course modifying correspondingly also the seat cloth and the bag, and the frame bars may be fixed at different angular positions so as to

create chairs suitable for any desired need.

It is finally to be noted that the materials may be changed in the broadest range, and that several modifications, additions and/or substitutions of elements may be resorted to the article of furniture, without departing however from its spirit and
5 objects nor from the scope of the invention. Thus for example the pivoting and fixing means of the various elements could be replaced by other equivalent means. Indeed it is to be understood that the scope of protection is defined in the appended claims.

CLAIMS

1) Folding article of furniture, characterized by the fact of comprising a central joint to which all the structural elements of the article frame are pivoted in such a way that the frame may be folded with the elements arranged parallel to each other in a compact condition of minimum occupied space.

2) Folding article of furniture according to Claim 1, characterized by the fact that the frame structural elements comprise four bearing legs, pivotally connected to the lower side of the central joint, and four upper bars, pivotally connected to the upper side of said central joint, for supporting the seat of the article.

3) Folding article of furniture according to Claim 1, characterized by the fact that the central joint consists of a block having four lower articulations for the legs and four upper articulations for the upper bars, at the free ends of the latter being threaded four corner pockets of a seat cloth.

4) Folding article of furniture according to Claim 3, characterized by the fact that the seat cloth is provided with a headrest pad, fixed to the cloth by cords tied to the cloth.

5) Folding article of furniture according to Claim 4, characterized by the fact that the article may be placed in a narrow and long tubular bag, adapted to contain the frame in a folded or collapsed condition and the seat cloth with headrest pad in a rolled up condition.

6) Folding article of furniture according to Claim 3, characterized by the fact that the central joint block has a cross shape, each arm of the cross having an upper fork-like seat and a lower fork-like seat, the wings of the forks being provided with holes for the passage of pins on which rotate the feet of stub pipes on which the bars forming the frame elements are in turn threaded and fixed.

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7) Folding article of furniture with central joint, substantially as hereinbefore described and as illustrated in the figures of the accompanying drawings, for the above mentioned objects.

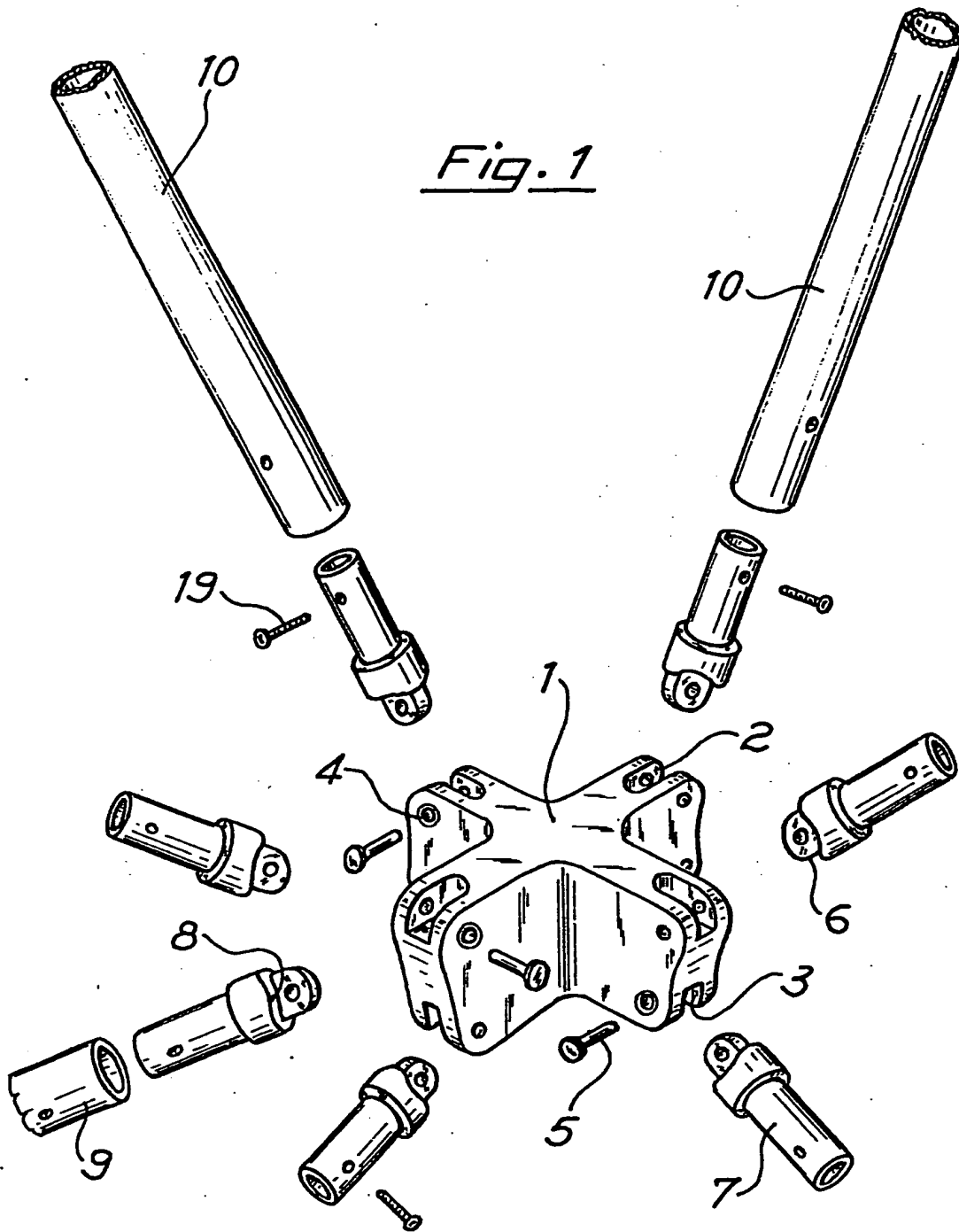


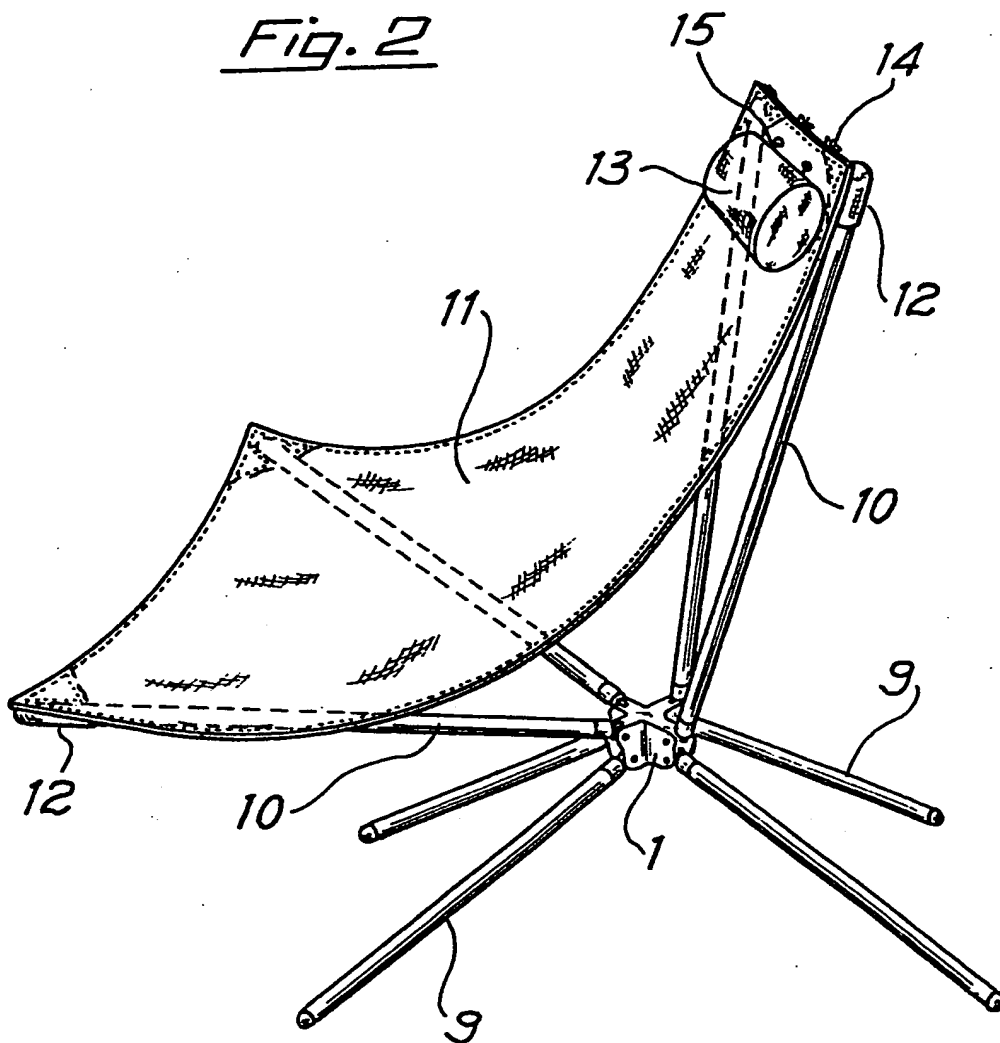
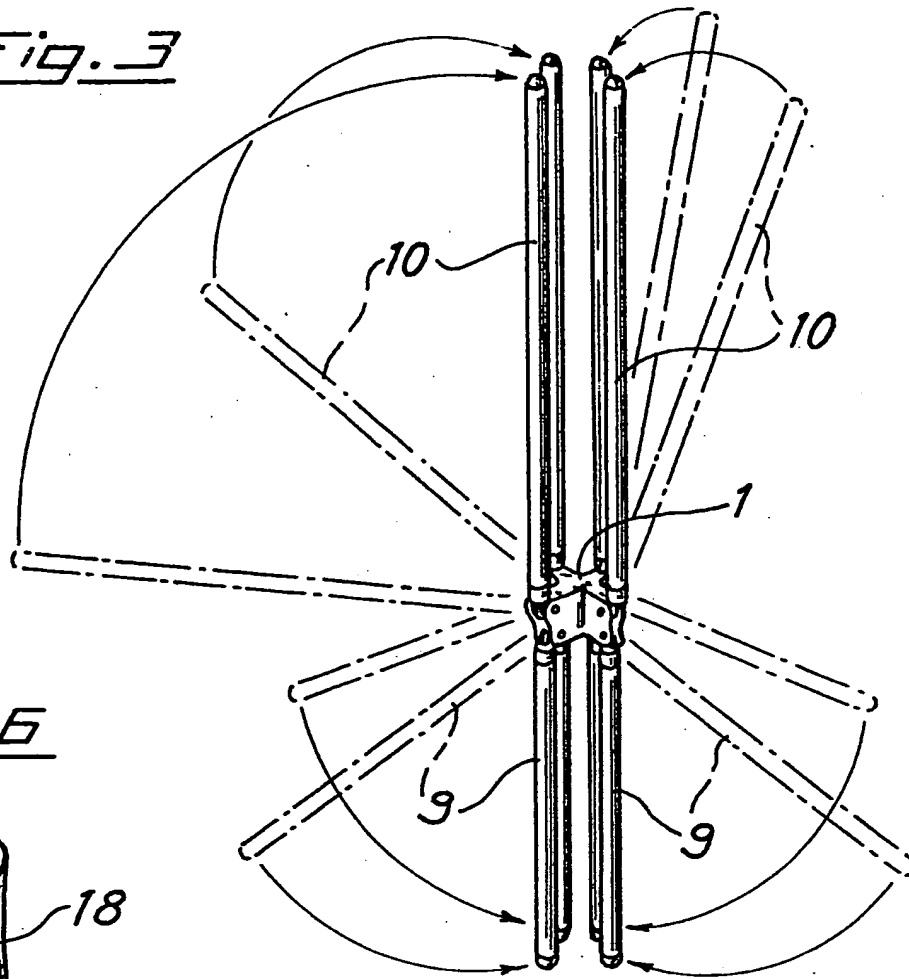
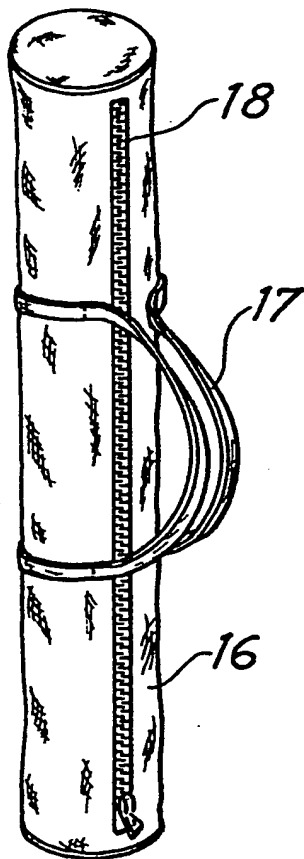
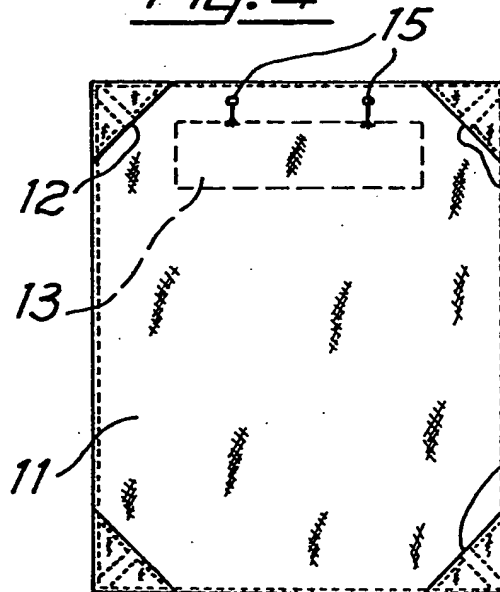
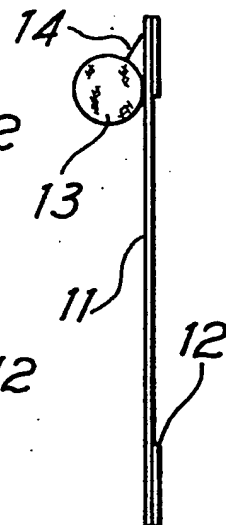
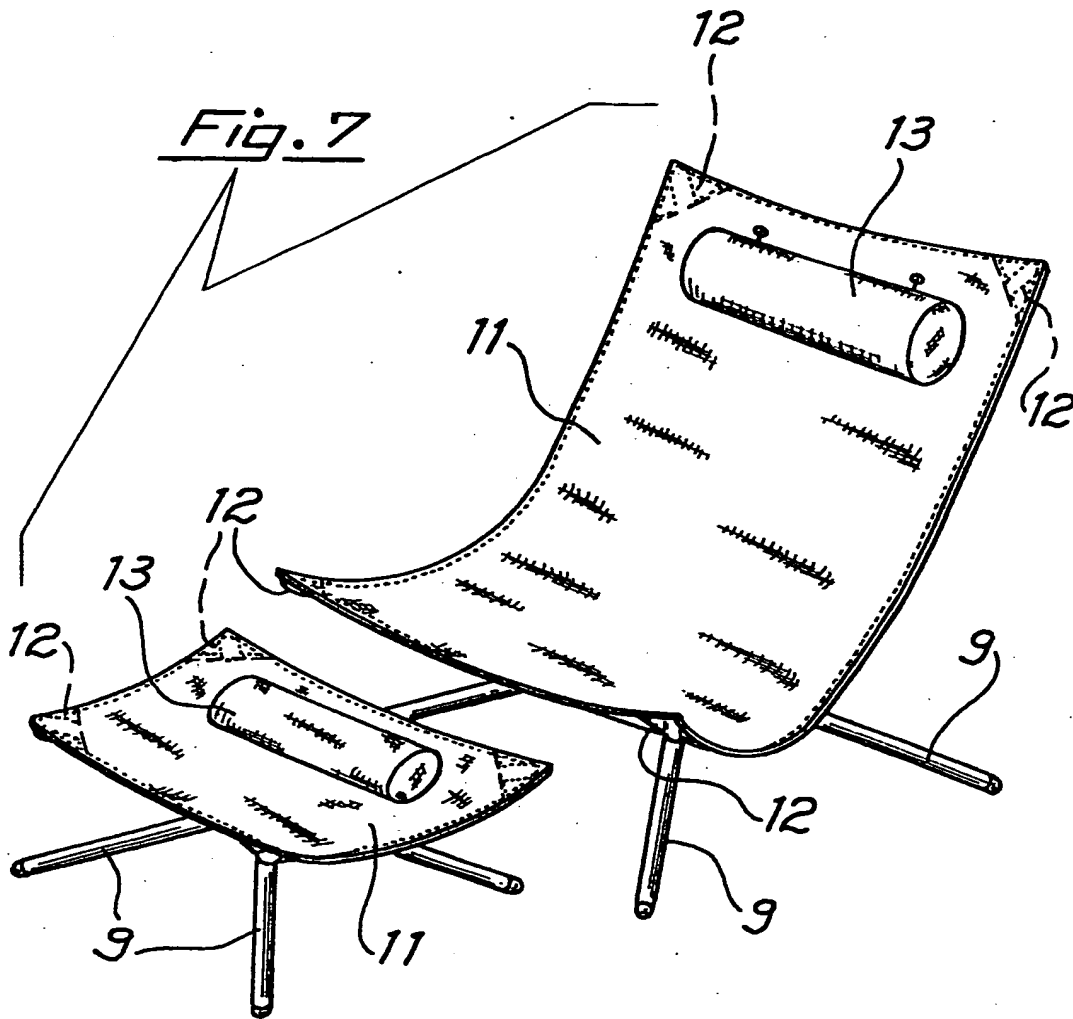
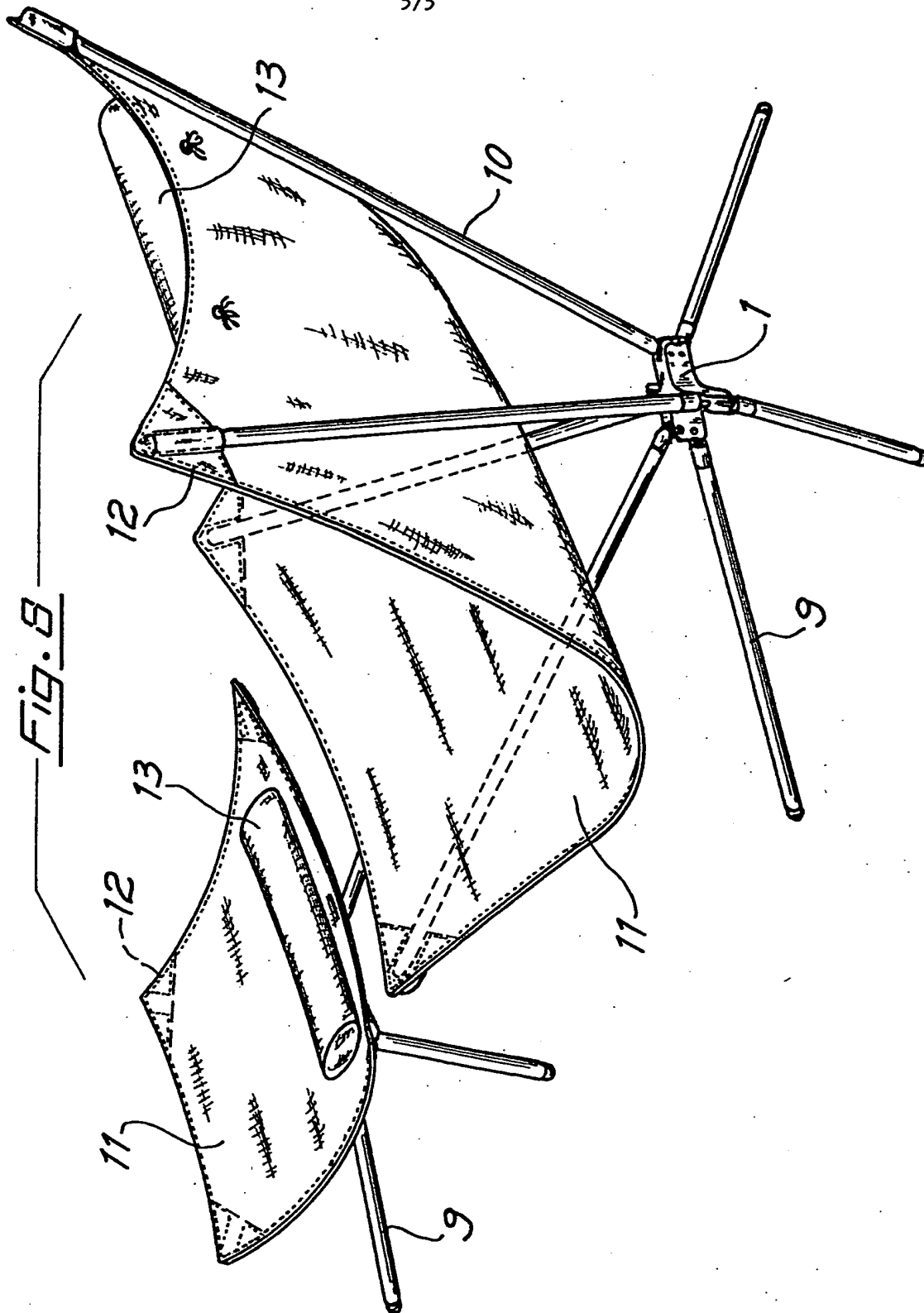
Fig. 2

Fig. 3Fig. 6Fig. 4Fig. 5







European Patent
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EUROPEAN SEARCH REPORT

01 39306

Application number

EP 84 20 0542

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
X	FR-A-1 034 032 (CROSERA) * Whole document *	1-3	A 47 C 4/42 A 47 C 9/10
A		6,7	
X	FR-A-2 454 779 (CHARBOUILLET) * Page 2, line 39 - page 4, line 24; figures *	1	
A		6,7	
A	FR-A-2 096 134 (GAIL) * Page 13, lines 16-30; figures 7,13 *	4,5,7	
A	FR-A-1 044 391 (LANCREY) * Whole document *	4	TECHNICAL FIELDS SEARCHED (Int. Cl.4) A 47 C
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 11-12-1984	Examiner VANDEVONDELE J.P.H.
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons A : member of the same patent family, corresponding document</p>			